J. Weber

#2/

1651

RAW SEQUENCE LISTING DATE: 07/05/2002
PATENT APPLICATION: US/09/483,543B TIME: 12:20:45

Input Set : A:\EP.txt
Output Set: N:\CRF3\07052002\I483543B.raw

<110> APPLICANT: Muir, Tom
Cotton, Graham
The Rockefeller University
<120> TITLE OF INVENTION: Multiple Sensor-Containing Polypeptides,
Methods of Preparation and Uses Thereof
<130> FILE REFERENCE: RU 453
<140> CURRENT APPLICATION NUMBER: 09/483,543B
<141> CURRENT FILING DATE: 2000-01-14
<160> NUMBER OF SEQ ID NOS: 10
<170> SOFTWARE: FastSEQ for Windows Version 3.0
<210> SEQ ID NO: 1
<211> LENGTH: 8
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Cleavage Site for PreScission Protease
<400> SEQUENCE: 1
Leu Glu Val Leu Phe Gln Gly Pro
1 5
<210> SEQ ID NO: 2
<211> LENGTH: 12
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Peptide Substrate
<400> SEQUENCE: 2
Glu Ala Ile Tyr Ala Ala Pro Phe Ala Lys Lys Lys
1 5 10
<210> SEQ ID NO: 3
<211> LENGTH: 64
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer
<400> SEQUENCE: 3
aaaagaaaaa aaggcggccg ctcggatctg atcgaaggtc gttgtgcggg caacttcgac 60
tcgg 64
<210> SEQ ID NO: 4
<211> LENGTH: 40
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer

RAW SEQUENCE LISTING DATE: 07/05/2002
PATENT APPLICATION: **US/09/483,543B** TIME: 12:20:45

Input Set : **A:\EP.txt**
Output Set: **N:\CRF3\07052002\I483543B.raw**

```
     75 <400> SEQUENCE: 4
     76  gcaaactggc tcttccgcag ccgctgaagt cctcatcggg                              40
     79 <210> SEQ ID NO: 5
     80 <211> LENGTH: 18
     81 <212> TYPE: PRT
     82 <213> ORGANISM: Artificial Sequence
     84 <220> FEATURE:
     85 <223> OTHER INFORMATION: Xa-Cys-(Crk-II)-Intein-CBD Construct
     87 <400> SEQUENCE: 5
     88  Met Ala Ser Ser Arg Val Asp Gly Gly Arg Ser Asp Leu Ile Glu Gly
     89   1               5                  10                  15
     90  Arg Cys
     93 <210> SEQ ID NO: 6
     94 <211> LENGTH: 18
     95 <212> TYPE: PRT
     96 <213> ORGANISM: Artificial Sequence
     98 <220> FEATURE:
     99 <223> OTHER INFORMATION: Cys-F1-PS-Biotin Construct
    101 <220> FEATURE:
    102 <221> NAME/KEY: misc_feature
    103 <222> LOCATION: 3
    104 <223> OTHER INFORMATION: Xaa = Lys-[Dapa(Fl)]
    106 <220> FEATURE:
    107 <221> NAME/KEY: misc_feature
    108 <222> LOCATION: 17
    109 <223> OTHER INFORMATION: Xaa = [Lys-(Biotin)]
    111 <400> SEQUENCE: 6
W--> 112  Cys Gly Xaa Gly Leu Glu Val Leu Phe Gln Gly Pro Val Arg Lys Gly
    113   1               5                  10                  15
W--> 114  Xaa Gly
    117 <210> SEQ ID NO: 7
    118 <211> LENGTH: 11
    119 <212> TYPE: PRT
    120 <213> ORGANISM: Artificial Sequence
    122 <220> FEATURE:
    123 <223> OTHER INFORMATION: High affinity ligand for the N-SH3 Domain of Crk
    125 <400> SEQUENCE: 7
    126  Pro Pro Pro Ala Leu Pro Pro Lys Arg Arg Arg
    127   1               5                  10
    133 <210> SEQ ID NO: 8
    134 <211> LENGTH: 318
    135 <212> TYPE: PRT
    136 <213> ORGANISM: Artificial Sequence
    138 <220> FEATURE:
    139 <223> OTHER INFORMATION: Protein Kinase Target
    141 <220> FEATURE:
    142 <221> NAME/KEY: misc_feature
    143 <222> LOCATION: 311
    144 <223> OTHER INFORMATION: Xaa = Lys-[Dapa(Fl)]
```

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PATENT APPLICATION: **US/09/483,543B** TIME: 12:20:45

Input Set : **A:\EP.txt**
Output Set: **N:\CRF3\07052002\I483543B.raw**

```
146 <400> SEQUENCE: 8
147  Lys Arg Gly Cys Ala Gly Asn Phe Asp Ser Glu Glu Arg Ser Ser Trp
148   1               5                  10                  15
149  Tyr Trp Gly Arg Leu Ser Arg Gln Glu Ala Val Ala Leu Leu Gln Gly
150              20                  25                  30
151  Gln Arg His Gly Val Phe Leu Val Arg Asp Ser Ser Thr Ser Pro Gly
152          35                  40                  45
153  Asp Tyr Val Leu Ser Val Ser Glu Asn Ser Arg Val Ser His Tyr Ile
154      50                  55                  60
155  Ile Asn Ser Ser Gly Pro Arg Pro Pro Val Pro Pro Ser Pro Ala Gln
156  65                  70                  75                  80
157  Pro Pro Pro Gly Val Ser Pro Ser Arg Leu Arg Ile Gly Asp Gln Glu
158                  85                  90                  95
159  Phe Asp Ser Leu Pro Ala Leu Leu Glu Phe Tyr Lys Ile His Tyr Leu
160              100                 105                 110
161  Asp Thr Thr Thr Leu Ile Glu Pro Val Ala Arg Ser Arg Gln Gly Ser
162          115                 120                 125
163  Gly Val Ile Leu Arg Gln Glu Glu Ala Glu Tyr Val Arg Ala Leu Phe
164      130                 135                 140
165  Asp Phe Asn Gly Asn Asp Glu Glu Asp Leu Pro Phe Lys Lys Gly Asp
166  145                 150                 155                 160
167  Ile Leu Arg Ile Arg Asp Lys Pro Glu Glu Gln Trp Trp Asn Ala Glu
168                  165                 170                 175
169  Asp Ser Glu Gly Lys Arg Gly Met Ile Pro Val Pro Tyr Val Glu Lys
170              180                 185                 190
171  Tyr Arg Pro Ala Ser Ala Ser Val Ser Ala Leu Ile Gly Gly Asn Gln
172          195                 200                 205
173  Glu Gly Ser His Pro Gln Pro Leu Gly Gly Pro Glu Pro Gly Pro Tyr
174      210                 215                 220
175  Ala Gln Pro Ser Val Asn Thr Pro Leu Pro Asn Leu Gln Asn Gly Pro
176  225                 230                 235                 240
177  Ile Tyr Ala Arg Val Ile Gln Lys Arg Val Pro Asn Ala Tyr Asp Lys
178                  245                 250                 255
179  Thr Ala Leu Ala Leu Glu Val Gly Glu Leu Val Lys Val Thr Lys Ile
180              260                 265                 270
181  Asn Val Ser Gly Gln Trp Glu Gly Glu Cys Asn Gly Lys Arg Gly His
182          275                 280                 285
183  Phe Pro Phe Thr His Val Arg Leu Leu Asp Gln Gln Asn Pro Asp Glu
184      290                 295                 300
W--> 185  Asp Phe Ser Gly Cys Gly Xaa Gly Leu Glu Val Leu Phe Gln
186  305                 310                 315
199 <210> SEQ ID NO: 9
200 <211> LENGTH: 326
201 <212> TYPE: PRT
202 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Recombinant Intermediate
207 <220> FEATURE:
208 <221> NAME/KEY: misc_feature
```

RAW SEQUENCE LISTING DATE: 07/05/2002
PATENT APPLICATION: US/09/483,543B TIME: 12:20:45

Input Set : A:\EP.txt
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```
209 <222> LOCATION: 311
210 <223> OTHER INFORMATION: Xaa = Lys-[Dapa(Fl)]
212 <220> FEATURE:
213 <221> NAME/KEY: misc_feature
214 <222> LOCATION: 325
215 <223> OTHER INFORMATION: Xaa = [Lys-(Biotin)]
217 <400> SEQUENCE: 9
218  Lys Arg Gly Cys Ala Gly Asn Phe Asp Ser Glu Glu Arg Ser Ser Trp
219   1               5                  10                  15
220  Tyr Trp Gly Arg Leu Ser Arg Gln Glu Ala Val Ala Leu Leu Gln Gly
221              20                  25                  30
222  Gln Arg His Gly Val Phe Leu Val Arg Asp Ser Ser Thr Ser Pro Gly
223          35                  40                  45
224  Asp Tyr Val Leu Ser Val Ser Glu Asn Ser Arg Val Ser His Tyr Ile
225      50                  55                  60
226  Ile Asn Ser Ser Gly Pro Arg Pro Pro Val Pro Pro Ser Pro Ala Gln
227  65                  70                  75                  80
228  Pro Pro Pro Gly Val Ser Pro Ser Arg Leu Arg Ile Gly Asp Gln Glu
229                  85                  90                  95
230  Phe Asp Ser Leu Pro Ala Leu Leu Glu Phe Tyr Lys Ile His Tyr Leu
231              100                 105                 110
232  Asp Thr Thr Thr Leu Ile Glu Pro Val Ala Arg Ser Arg Gln Gly Ser
233          115                 120                 125
234  Gly Val Ile Leu Arg Gln Glu Glu Ala Glu Tyr Val Arg Ala Leu Phe
235      130                 135                 140
236  Asp Phe Asn Gly Asn Asp Glu Glu Asp Leu Pro Phe Lys Lys Gly Asp
237  145                 150                 155                 160
238  Ile Leu Arg Ile Arg Asp Lys Pro Glu Glu Gln Trp Trp Asn Ala Glu
239                  165                 170                 175
240  Asp Ser Glu Gly Lys Arg Gly Met Ile Pro Val Pro Tyr Val Glu Lys
241              180                 185                 190
242  Tyr Arg Pro Ala Ser Ala Ser Val Ser Ala Leu Ile Gly Gly Asn Gln
243          195                 200                 205
244  Glu Gly Ser His Pro Gln Pro Leu Gly Gly Pro Glu Pro Gly Pro Tyr
245      210                 215                 220
246  Ala Gln Pro Ser Val Asn Thr Pro Leu Pro Asn Leu Gln Asn Gly Pro
247  225                 230                 235                 240
248  Ile Tyr Ala Arg Val Ile Gln Lys Arg Val Pro Asn Ala Tyr Asp Lys
249                  245                 250                 255
250  Thr Ala Leu Ala Leu Glu Val Gly Glu Leu Val Lys Val Thr Lys Ile
251              260                 265                 270
252  Asn Val Ser Gly Gln Trp Glu Gly Glu Cys Asn Gly Lys Arg Gly His
253          275                 280                 285
254  Phe Pro Phe Thr His Val Arg Leu Leu Asp Gln Gln Asn Pro Asp Glu
255      290                 295                 300
W--> 256  Asp Phe Ser Gly Cys Gly Xaa Gly Leu Glu Val Leu Phe Gln Gly Pro
257  305                 310                 315                 320
W--> 258  Val Arg Lys Gly Xaa Gly
259                  325
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/483,543B

DATE: 07/05/2002
TIME: 12:20:45

Input Set : A:\EP.txt
Output Set: N:\CRF3\07052002\I483543B.raw

```
     264 <210> SEQ ID NO: 10
     265 <211> LENGTH: 5
     266 <212> TYPE: PRT
     267 <213> ORGANISM: Artificial Sequence
     269 <220> FEATURE:
     270 <223> OTHER INFORMATION: Site for Sequential Ligation
     272 <220> FEATURE:
     273 <221> NAME/KEY: misc_feature
     274 <222> LOCATION: 5
     275 <223> OTHER INFORMATION: Xaa = Cys (Xa-Cys)
     278 <400> SEQUENCE: 10
W--> 279  Ile Glu Gly Arg Xaa
     280   1               5
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/05/2002
PATENT APPLICATION: US/09/483,543B TIME: 12:20:46

Input Set : A:\EP.txt
Output Set: N:\CRF3\07052002\I483543B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 3,17
Seq#:8; Xaa Pos. 311
Seq#:9; Xaa Pos. 311,325
Seq#:10; Xaa Pos. 5

VERIFICATION SUMMARY DATE: 07/05/2002
PATENT APPLICATION: **US/09/483,543B** TIME: 12:20:46

Input Set : **A:\EP.txt**
Output Set: **N:\CRF3\07052002\I483543B.raw**

L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:16
L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:304
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:304
L:258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:320
L:279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0